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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/060,909 | 01/30/2002 | Martin Antoni | 637.0015USX | 9466 |

7590

02/28/2003

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EXAMINER

SHAFFER, RICKY D

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

101 060, 909

Applicant(s)

ANTONI ET AL

Examiner

R.D. SHAFER

Group Art Unit

2872

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 months MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 12/09/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 33-65 is/are pending in the application.
- Of the above claim(s) 33-52, 57 AND 63-65 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 53-56 AND 58-62 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☒ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____

☒ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5, 6 & 7 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

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1. Applicant's election with traverse of Group II (claims 53-65) and species "H", depicted by Fig. 15, in Paper No. 9 is acknowledged. The traversal is on the basis that the public interest and economy are best served by examining all of the claims of the nonelected invention/species along with the elected invention. This is not found persuasive because the lack of unity of invention set forth in Paper No. 8 is based on the fact that the inventions/species are not so linked to form a single inventive concept and they lack the same or corresponding special technical features. Continued search and examination of claim(s) to a nonelected invention/species including claims have substantially different special technical features is a prima facie showing of economical burden on part of the Office. Applicant may overcome the requirement for lack of unity of invention by presenting an allowable linking claim or by providing a clear admission on the record that the claim(s) drawn to a given non-elected invention/species is not patentably distinct from the elected invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 33-52, 64 and 65 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

3. Applicant asserts that claims 53-63 read on the elected invention/species "h", depicted by Fig. 15. The examiner agrees that claims 53-56 and 58-62 read on the elected species. However, the examiner disagrees that claims 57 and 63 read on the elected species for the reasons stated below.

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The examiner is of the opinion that claim 57 is drawn to one of other species due to the fact that the grazing incidence mirror has positive optical power which is not the case with elected species "h", which clearly illustrates that the grazing incidence has negative power.

The examiner is of the opinion that claims 57 and 63 are drawn to one of other species due to the fact that the field forming optical component includes two grazing incidence mirrors which is not the case with elected species "h", which clearly illustrates only one grazing incidence mirror.

Accordingly, claims 57 and 63 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable generic or linking claim.

4. Claims 53-56 and 58-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 53 is vague and indefinite due to the fact the structure which makes up the device is not organized and correlated in such a manner so as to particularly point out and distinctly the subject which applicant regards as the invention. The normal incident mirror lacks proper with respect to the object plane and the image plane. The field forming optical component lacks proper nexus with respect to the object plane, the image plane and the normal incidence mirror.

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Claim 58 is vague and indefinite for the same reasons stated above. The second normal incidence mirror lacks proper nexus with respect to the object plane, the image plane the first normal incidence mirror and the field forming optical component.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 53-55, 59, 60 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Ban ('538).

To the extent the claims are definite, Ban discloses a multi-mirror system comprising an object plane (S1), an image plane (MK), a normal incidence mirror (M2,R2,M3,M4) and a field fielding optical component (R3,S2), wherein said field forming optical component comprises a mirror (R3). Note figures 5A to 5E and the associated description thereof.

7. Claims 53-55, 59, 60 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by MacDowell et al ('781).

To the extent the claims are definite, MacDowell et al discloses a multi-mirror system comprising an object plane [(172),(154)], an image plane [(172),(156)], a normal incidence mirror

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[(174),(155)] and a field ^{forming}fielding optical component [(172),(153)]. Note by example only figures 11A to 11C and figures 14A-14B and the associated description thereof.

8. Claims 53-55 and 60-62 are rejected under 35 U.S.C. 102(b) as being anticipated by Sweatt ('759).

To the extent the claims are definite, Sweatt discloses a multi-mirror system comprising an object plane (Mask), an image plane (52), a normal incidence mirror (59) and a field ^{forming}fielding optical component (58, 71). Note figures 4, 5 and 7 and the associated description thereof.

9. Claims 53-55, 58-60 and 62 are rejected under 35 U.S.C. 102^a(b) as being anticipated by Schultz et al ('793).

To the extent the claims are definite, Schultz et al discloses a multi-mirror system comprising an object plane [(22),(302), (400, 410)], an image plane [(14),(316),(406)], a normal incidence mirror [(20),(304,306), (412,422)] and a field fielding optical component [(32),(314),(416)]. Note figures 4, 5, 37-39, 43 and 56-59 and the associated description thereof.

10. Claims 53-56 and 58-62 are rejected under 35 U.S.C. 102(a) as being anticipated by Schultz et al ('732).

To the extent the claims are definite, Schultz et al discloses a multi-mirror system comprising an object plane [(22),(300,302),(400)], an image plane [(14),(318),(408)], a normal incidence mirror [(20),(304),(402)] and a field ^{forming}fielding optical component

[(32),(306,308),(404,406)]. Note figures 4, 5, 24-27, 29, 34-38, 42-46 and 48-51 and the associated description thereof.

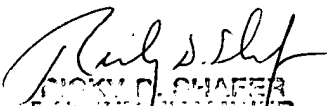
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11. The Antoni et al reference has been lined through on the information disclosure statement (PTO-1449), filed on 3/22/02, has not been considered by the examiner because applicant failed to properly include a date for said reference. The references lined through on the information disclosure statement (PTO-1449), filed on 8/06/02, have not been considered by the examiner because applicant failed to include a copy of the references. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

12. Any inquiry concerning this communication should be directed to R.D. Shafer at telephone number (703) 308-4813.

RDS

February 23, 2003


RICK D. SHAFER
PATENT EXAMINER
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